

**What is claimed is:**

1. A converter comprising:  
a chassis comprising:

a plurality of first ports;

5 a plurality of second ports wherein the second ports are of a different type than  
the first ports and wherein each first port is electrically coupled to a distinct second port  
to create a plurality of port pairs; and  
a monitor electrically coupled to the plurality of port pairs to monitor information  
concerning a selected port pair.

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2. The converter of claim 1 wherein the information monitored by the monitor  
includes activity on the first and second port of a selected pair.

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3. The monitor of claim 1 wherein the information monitored by the monitor  
includes whether the first and second port of a selected port pair are properly  
terminated.

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4. The converter of claim 1 wherein the plurality of first ports are electrical  
connectors that receive signals from copper wiring and the plurality of second ports are  
optic connectors that receive signals from fiber optic cables.

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5. The converter of claim 1 wherein the plurality of first ports are electrical  
connectors that receive signals from twisted pair wiring and the plurality of second ports  
are optic connectors that receive signals from multimode fiber.

6. The converter of claim 1 wherein the plurality of first ports are electrical  
connectors that receive signals from twisted pair wiring and the plurality of second ports  
are optic connectors that receive signals from single mode fiber.

7. The converter of claim 1 wherein the plurality of first ports are electrical connectors that receive signals from coaxial cables and the plurality of second ports are optic connectors that receive signals from multimode fiber.

5 8. The converter of claim 1 wherein the plurality of first ports are electrical connectors that receive signals from coaxial cables and the plurality of second ports are optic connectors that receive signals from single mode fiber.

9. The converter of claim 1 wherein the plurality of first ports are optical  
10 connectors that receive signals from single mode fiber and the plurality of second ports are optical connectors that receive signals from multimode fiber.

10. The converter of claim 1 wherein the plurality of first ports are RJ-45 jacks and  
15 the plurality of second ports are fiberoptic connectors.

11. The converter of claim 1 wherein the monitor further comprises a display for  
displaying the selected port pair being monitored.

12. The converter of claim 11 wherein the display is a digit display.  
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13. The converter of claim 11 wherein the display is a liquid crystal display.

14. The converter of claim 1 wherein the monitor further comprises a switch for  
selecting a port pair to be monitored.  
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15. The converter of claim 14 wherein the switch is a toggle switch.

16. The converter of claim 14 wherein the switch includes a pair of switches.

30 17. The converter of claim 16 wherein the pair of switches are momentary switches.

18. The converter of claim 6 further comprising a plurality of indicators for indicating activity on the selected port pair being monitored and termination of first and second port of the selected port pair being monitored.

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19. The converter of claim 18 wherein the plurality of indicators are light emitting diodes.

20. The converter of claim 11 wherein the display flashes if a fault condition exists for the port pair being monitored.

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21. The converter of claim 1 wherein the monitor is detachably coupled to the chassis.

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22. The converter of claim 1 wherein the plurality of first ports are grouped together in a first group and the plurality of second ports are grouped together in a second group that is located away from the first group.

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23. The converter of claim 22 wherein the monitor is located between the first and second group.

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24. A monitor comprising:  
an input for receiving signals from multiple ports wherein the ports include a plurality of first ports of a first type and a plurality of second ports of a second type that are different than the first type wherein the ports are electrically coupled so that a first port is electrically coupled to a distinct second port to form a port pair;

means electrically coupled to the input for selecting a port pair to monitor; and  
a display electrically coupled to the means for selecting and the input to display the port pair is being monitored.

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25. The monitor of claim 16 wherein the display also displays whether a fault condition is present for the port pair being monitored.

26. The monitor of claim 24 further comprising:

5 an indicator electrically coupled to the means for selecting wherein the indicator indicates a condition about the port pair being monitored.

27. The monitor of claim 24 wherein each port pair is assigned a unique number and the display is a light emitting digit display that displays the unique number of the port  
10 pair being monitored.

28. The monitor of claim 24 wherein the means for selecting is a switch.

29. The monitor of claim 24 wherein the means for selecting is a pair of momentary  
15 switches.

30. The monitor of claim 24 wherein the indicator is a light emitting diode.

31. The monitor of claim 24 wherein the first ports are RJ-45 ports and the second  
20 ports are fiber optic ports.

32. The monitor of claim 24 wherein the plurality of first ports are electrical connectors that receive signals from twisted pair wiring and the plurality of second ports are optic connectors that receive signals from multimode fiber.

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33. The monitor of claim 24 wherein the plurality of first ports are electrical connectors that receive signals from twisted pair wiring and the plurality of second ports are optic connectors that receive signals from single mode fiber.

34. The monitor of claim 24 wherein the plurality of first ports are electrical connectors that receive signals from coaxial cables and the plurality of second ports are optic connectors that receive signals from multimode fiber.

5 35. The monitor of claim 24 wherein the plurality of first ports are electrical connectors that receive signals from coaxial cables and the plurality of second ports are optic connectors that receive signals from single mode fiber.

10 36. The monitor of claim 24 wherein the plurality of first ports are optical connectors that receive signals from single mode fiber and the plurality of second ports are optical connectors that receive signals from multimode fiber.

37. The monitor of claim 24 wherein the display is a digit display.

15 38. The monitor of claim 24 wherein the display is a liquid crystal display.

39. A monitor circuit board assembly comprising:  
an input for receiving signals from a plurality of port pairs of a converter;  
a port pair selector for selecting which port pair to monitor;  
20 a monitor circuit coupled to the input and port pair selector wherein the monitor circuit monitors at least one condition of the port pair selected; and  
a display to indicate which of a plurality of port pairs is being monitored.

25 40. The assembly of claim 39 wherein the display also displays a fault condition on the port pair being monitored.

41. The assembly of claim 39 wherein the display is an LED digit display.

30 42. The assembly of claim 39 wherein the display is a liquid crystal display.

43. The assembly of claim 39 wherein the port pair selector is a switch.

44. The assembly of claim 39 wherein the port pair selector is a pair of switches.

5 45. The assembly of claim 44 wherein the pair of switches are momentary switches.

46. The assembly of claim 39 wherein the plurality of port pairs includes first electrical ports that receive signals from twisted pair wiring and a plurality of second optical ports that receive signals from multimode fiber.

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47. The assembly of claim 39 wherein the plurality of port pairs includes first electrical ports that receive signals from twisted pair writing and a plurality of second optical ports that receive signals from single mode fiber.

15 48. The assembly of claim 39 wherein the plurality of port pairs includes first electrical ports that receive signals from coaxial cables and a plurality of second optical ports that receive signals from multimode fiber.

20 49. The assembly of claim 39 wherein the plurality of port pairs includes first electrical ports that receive signals from coaxial cables and a plurality of second optical ports that receive signals from single mode fiber.

25 50. The assembly of claim 39 wherein the plurality of port pairs includes first optical ports that receive signals from single mode fiber and a plurality of second optical ports that receive signals from multimode fiber.

51. A monitor for a converter comprising:  
an input electrically coupled to a plurality of port pairs wherein each of the port pairs includes a port of a first type electrically coupled to a port of a second type  
30 wherein the first type accepts signals in a different format than the second type;

a selector coupled to the input for selecting one of the plurality of port pairs to monitor;

a monitor circuit for monitoring at least one condition of the port pair selected; and

5 a display coupled to the input for displaying the port pair being monitored and whether a fault condition is present at that port pair being monitored.

52. The monitor of claim 51 further comprising a plurality of indicators coupled to the input wherein each of the plurality of indicators indicates a particular type of fault  
10 condition for the twisted pair being monitored.

53. The monitor of claim 51 wherein the plurality of first ports are electrical connectors that receive signals from twisted pair wiring and the plurality of second ports are optic connectors that receive signals from multimode fiber.  
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54. The monitor of claim 51 wherein the plurality of first ports are electrical connectors that receive signals from twisted pair wiring and the plurality of second ports are optic connectors that receive signals from single mode fiber.

20 55. The monitor of claim 51 wherein the plurality of first ports are electrical connectors that receive signals from coaxial cables that the plurality of second ports are optic connectors that receive signals from multimode fiber.

56. The monitor of claim 51 wherein the plurality of first ports are electrical  
25 connectors that receive signals from coaxial cables and the plurality of second ports are optic connectors that receive signals from single mode fiber.

57. The monitor of claim 51 wherein the plurality of first ports are optical  
30 connectors that receive signals from single mode fiber and the plurality of second ports are optical connectors that receive signals from multimode fiber.

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